CLAIMS LISTING

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3   Claims 1-111 (canceled).

4

5   112. (Currently Amended) A computer-implemented business method for actively and

6   declaratively managing, implementing, and executing a first dynamic process

7   incorporating a dynamic pattern of operations driven by real-world conditions causing at

8   least a first behavioral pattern to emerge, said computer-implemented business method

9   comprising:

10

11   (a) declaring and stating an objective ~~Objective~~ of said first dynamic process as a

12   set of measurable Goals and Constraints;

13

14   (b) declaring and stating at least one objective ~~Objective~~ Rule Set having a

15   plurality of Rules, said Rules in the said objective ~~Objective~~ Rule Set being

16   defined to accomplish at least a part of said objective ~~Objective~~ by the

17   combination of at least one subset thereof:

18   wherein the Rules in said objective ~~Objective~~ Rule Set may act in any

19   order subject to the limitation that, for any specific Rule in said objective

20   ~~Objective~~ Rule Set, that specific Rule's Condition and applicable

21   Constraints must be satisfied before that specific Rule's Action may occur;

22

23   (c) delegating to at least one specific set of Actors consisting of at least one Actor:

24   at least a first subordinate objective ~~Objective~~, subordinate to the objective

25   ~~Objective~~, stating the first subordinate objective ~~Objective~~ as a subset of

26   subordinate, measurable Goals and subordinate Constraints;

27   a set of Rules for accomplishing said first subordinate objective ~~Objective~~;

28   authority via at least one Rule stating authority for attaining the

29   subordinate, measurable Goals of said first subordinate objective

30   ~~Objective~~;

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accountability via at least one Rule stating accountability for attaining the subordinate, measurable Goals of said first subordinate objective ~~Objective~~; and,

responsibility via at least one Rule stating responsibility for attaining the subordinate, measurable Goals of said first subordinate objective ~~Objective~~ subject to the Constraints and subordinate Constraints;

(d) determining if at least one Rule's Condition is satisfied and if so triggering said Rule's Action;

wherein said Rule's Condition incorporates at least one Measurable value ~~Value~~ from at least one member of a set of sources; and,

said set of sources comprises ~~comprise~~ a source internal to said first dynamic process, a source external to said first dynamic process, and a source in the real world;

(e) modifying at least one Element of said dynamic process through the Action of at least a Rule whose Condition is triggered by at least one input from an event in the real world;

(f) defining any Actor as being at least one member of an Actor set comprising human agent, semi-automated agent, and automated agent;

(g) defining any Element as being one member of an Element set comprising a Goal, Rule, Rule Set, Condition, Action, Constraint, Measurable value ~~Value~~, and Delegation;

(h) defining each Rule so as to comprise a Condition that is satisfied when it evaluates to a specified and predetermined value and an Action that is triggered when the Condition is satisfied;

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1   (i) determining the triggered Action of at least a first Rule and its relative order
2   with respect to a second Rule's Action, and therefore the behavior of the dynamic
3   process, at least partially by logical inference from Conditions and Constraints
4   rather than said relative order being predetermined and required by human
5   mandate;

6
7   (j) executing automatically at least a subset of the dynamic pattern of operations
8   that progresses towards said objective Objective, defining said subset of the
9   dynamic pattern of operations as comprising a plurality of operations, each
10 operation therein being temporally contiguous to at least one other operation in
11 said subset of the dynamic pattern of operations; and,

12
13 (k) specifying a plurality of Elements and implementing each of the steps of
14 declaring and stating, delegating, determining, and modifying, through a
15 declarative and therefore non-procedural representation.

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18 113. (Previously Presented) A method as in Claim 112 further comprising iterating at
19 least one of the steps of declaring and stating, delegating, determining, and modifying.

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22 114. (Currently Amended) A method as in Claim 112, further comprising the step of
23 redeclaring and restating at least one Action of at least one Rule as a second dynamic
24 process.

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27 115. (Previously Presented) A method as in Claim 112 wherein the dynamic process
28 represents a business's operational flow, said operational flow being that business's
29 fundamental business activity of producing goods and services.

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1   116. (Previously Presented) A method as in Claim 112 further comprising adding at least

2   one new Element to the dynamic process in response to at least one input.

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5   117. (Currently Amended) A method as in Claim 112 further comprising the step of using

6   the measurable Goals and Measurable values ~~Values~~ to enable assessment of any member

7   of a set of assessments, that set of assessments comprising risk of error, minimum

8   contribution of any Rule to the Goal, maximum contribution of any Rule to the Goal, risk

9   of deviation from the Goal due to the Action of any Rule, performance of at least one

10   Actor, and relative efficiencies among any two Actors.

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13   118. (Previously Presented) A method as in Claim 112 further comprising using the

14   deviation of Measurable values ~~Values~~ from measurable Goals for at least one member of

15   a set comprising accounting control, regulatory control, and reporting without first

16   requiring that the dynamic process terminate.

17

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19   119. (Previously Presented) A method as in Claim 112 wherein said method forms a

20   business autopilot, which, once initiated, requires no human intervention to manage

21   successful execution of said subset of the dynamic pattern of operations even when

22   Actions and operations are implemented by human Actors.

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25   120. (Currently Amended) A method as in Claim 112, further comprising:

26   including a set of Constraints consisting of at least one Constraint;

27   including a first Rule Set consisting of at least a first contained ~~Contained~~ Rule;

28   including a second Rule Set consisting of at least a second contained ~~Contained~~ .

29   Rule; and,

30   including a set of ordering Rules consisting of at least one ordering Rule;

4

1   wherein the relative order by which each first contained Contained Rule in the first Rule

2   Set and at least a second contained Contained Rule in the second Rule Set are satisfied is

3   determined according to at least one member of a set comprising the set of Constraints,

4   implicit Rule precedence making the Action of each Contained Rule in the first Rule Set

5   satisfy a Condition of the second Contained Rule, the set of Constraints, and the set of

6   ordering Rules.

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9   121. (Currently Amended) A method as in Claim 112, further comprising declaring and

10   stating at least a first Rule Set and a second Rule Set, wherein the second Rule Set is

11   subordinate to the first Rule Set, and wherein the second Rule Set inherits from the first

12   Rule Set at least one Condition of a Rule in the first Rule Set as a Constraint on the

13   second Rule Set and at least one Action of a Rule in the first Rule Set as a Goal of the

14   second Rule Set.

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17   122. (Currently Amended) A method as in Claim 112, further comprising declaring and

18   stating at least a first Rule Set and a second Rule Set, wherein the second Rule Set is

19   subordinate to the first Rule Set, and wherein at least one change in Constraints by Action

20   of at least one Rule of the second Rule Set is passed to the first Rule Set.

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23   123. (Currently Amended) A method as in Claim 112, wherein said declarative and

24   therefore non-procedural representation is at least one member of a representation set

25   comprising symbolic logic and declarative computer language.

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28   124. (Currently Amended) A method as in Claim 112, wherein for at least one Rule:

29   the Condition of said Rule detects a difference between at least one Element of

30   said dynamic process and a Measurable value Value from at least one input, and

31   the Action of said Rule has an effect affect on at least that one Element of said

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1   first dynamic process by modifying that one Element to do at least one member of

2   a response set comprising accommodate the Measurable value ~~Value~~, and adjust

3   performance of said dynamic process as indicated by the Measurable value ~~Value~~.

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6   125. (Currently Amended) A method as in Claim 112 further comprising analyzing the

7   efficiency of a business operation by measuring the deviation of Measurable values

8   ~~Values~~ from measurable Goals.

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11   126. (Previously Presented) A method as in Claim 112 further comprising:

12   incorporating a set of resolving Constraints comprising at least one member of a

13   resolving set comprising a resolving Constraint and a resolving Rule; and,

14   incorporating at least one ambiguous Rule;

15   wherein said set of resolving Constraints determines whether the ambiguous Rule's

16   Action will be triggered when the evaluation of the ambiguous Rule's Condition is not a

17   value that has been otherwise determined to cause the ambiguous Rule's action to trigger.

18

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20   127. (Previously Presented) A method as in Claim 112 wherein, in the step of delegating,

21   at least one member of what is delegated to one specific Actor is a consequence of the

22   Rules, Constraints, and measurements associated with an Actor.

23

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25   128. (Previously Presented) A method as in Claim 112 wherein at least one Element

26   maintains consistency among any combination of authority to act, responsibility,

27   response to operational failure, and accountability.

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30   129. (Previously Presented) A method as in Claim 112 wherein at least one Rule makes

31   explicit why Actions are undertaken and what is to be achieved.

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3   130. (Currently Amended) A method as in Claim 112 further comprising replacing a first

4   unrefined ~~Unrefined~~ Rule by a set of refinement Rules that include at least the Action of

5   the first unrefined ~~Unrefined~~ Rule without the set of refinement Rules including the first

6   unrefined ~~Unrefined~~ Rule.

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9   131. (Currently Amended) A method as in Claim 130 further comprising:

10   incorporating a first risk of error associated with the first unrefined ~~Unrefined~~

11   Rule;

12   incorporating a second risk of error associated with a second refinement

13   ~~Refinement~~ Rule belonging to the set of refinement Rules;

14   wherein the second refinement ~~Refinement~~ Rule has the least risk of error of any

15   refinement ~~Refinement~~ Rule in the set of refinement Rules; and wherein the second risk

16   of error is not greater than the first risk of error.

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19   132. (Currently Amended) A method as in Claim 112 wherein the step of declaring and

20   stating at least one objective ~~Objective~~ Rule Set comprises stating at least a first objective

21   ~~Objective~~ Rule Set and a second objective ~~Objective~~ Rule Set, wherein the first objective

22   ~~Objective~~ Rule Set operates at a first level of the dynamic process and the second

23   objective ~~Objective~~ Rule Set operates at a second level of the dynamic process.

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26   133. (Currently Amended) A method as in Claim 132, wherein said first and second

27   levels are indistinct and said first objective ~~Objective~~ Rule Set and said second objective

28   ~~Objective~~ Rule Set form a peer to peer organization.

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1   134. (Currently Amended) A method as in Claim 132, wherein said first and second

2   levels are distinct and said first objective ~~Objective~~ Rule Set and said second objective

3   ~~Objective~~ Rule Set form a hierarchical organization.

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6   135. (Currently Amended) A method as in Claim 112, further comprising declaring and

7   stating at least a first Rule Set and a second Rule Set, wherein the second Rule Set is

8   subordinate to the first Rule Set, and wherein the first Rule Set further receives, from the

9   second Rule Set, the result of an Action by a Rule of the second Rule Set as satisfaction

10   of at least one Condition of a Rule of the first Rule Set.

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13   136. (Currently Amended) A method as in Claim 135, wherein the first Rule Set further

14   comprises at least a superior objective ~~Objective~~ and wherein the Action of the second

15   Rule Set conveys information to the first Rule Set sufficient for the first Rule Set to alter

16   at least the superior objective ~~Objective~~ when the superior objective ~~Objective~~ does not

17   conform to a Measurable value ~~Value~~ from the real world.

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20   137. (Currently Amended) A method as in Claim 112, further comprising:

21   including at least a second Rule Set comprising a set of Rules that are connected

22   and have no Rule for which both its Condition is not satisfied by some

23   combination of Actions and events, and its Action does not eventually in

24   combination with the Actions of other Rules in the set satisfy the Conditions of at

25   least one Rule;

26   including at least a first Satisfied Rule in said second Rule Set whose Condition

27   has been satisfied at least once;

28   and,

29   further including a set of pairs comprising an identification of at least one

30   satisfied ~~Satisfied~~ Rule and a time said satisfied ~~Satisfied~~ Rule was satisfied, said

31   set of pairs being partially ordered and constituting a first subordinate process.

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3   138. (Previously Presented) A method as in Claim 137 wherein the second Rule Set
4   comprises the entire set of satisfied Rules of the first dynamic process and no explicit
5   ordering of the Rules in the second Rule Set is provided in defining said first dynamic
6   process.

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9   139. (Previously Presented) A method as in Claim 112 wherein said set of Rules includes
10 at least one anticipatory Rule, the satisfaction of the Condition portion of said
11 anticipatory Rule being merely a possibility and neither a prediction nor a mandate, when
12 said anticipatory Rule is initially stated.

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15 140. (Currently Amended) A method as in Claim 139 wherein said Condition of said
16 anticipatory Rule incorporates at least one conjunct which, at the time of creation of the
17 Rule, incorporates a Measurable value Value that is contrary to the known and projected
18 state of the real world.

19

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21 141. (Previously Presented) A method as in Claim 112 further comprising:
22   storing said declarative and therefore non-procedural representation in a static and
23   stable form; and,
24   preserving human knowledge of said dynamic process.

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26
27 142. (Currently Amended) A method as in Claim 141 further comprising the steps of
28   organizing in a first business entity said declarative and therefore non-procedural
29   representation of said dynamic process for conveyance to a second business
30   entity; and,

9

1   conveying said declarative and therefore non-procedural representation from the

2   first business entity to the second business entity.

3

4   143. (Previously Presented) A method as in Claim 141 wherein said declarative and

5   therefore non-procedural representation of said dynamic process stores knowledge of at

6   least one member of a set comprising organizational management, at least one model of

7   business organization, at least one operational process, and at least one strategic process.

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10   144. (Currently Amended) A method as in Claim 141 further comprising the steps of:

11   retrieving at least a portion of said declarative and therefore non-procedural

12   representation;; and,

13   instantiating said portion of said declarative and therefore non-procedural

14   representation as a second dynamic process in a business.

15

16   145. (Currently Amended) A method as in Claim 112 wherein the step of delegating to at

17   least one specific Actor further comprises:

18   a first Actor at a first level stating a plurality of business Rules comprising

19   possible Conditions, each Condition comprising at least one member of a set

20   comprising factual circumstance, market situation, business event, and

21   Measurable value Value, and joined with at least one corresponding desired

22   Action matching a first measurable Goal;

23   a second Actor at a second level identifying a Goal-achieving set of business

24   Rules enabling said first measurable Goal to be attained;

25   and,;

26   said second Actor communicating at least a first result of the Goal-achieving set

27   of Rules to said first Actor.

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30   146. (Previously Presented) A method as in Claim 145 wherein said plurality of business

31   Rules are responsive to a plurality of events, and wherein the actual operation of the

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1 plurality of business Rules are combined to form a business process independent of any

2 pre-existing definition of the business process.

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5 147. (Previously Presented) A method as in Claim 145 wherein said measurable Goal is

6 expressed as at least one Goal Rule comprising a Goal Condition which identifies said

7 measurable Goal and a Goal Action which specifies any combination of the members of a

8 measure set consisting of a measure of success, a measurement Constraint, and a measure

9 of failure.

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12 148. (Currently Amended) A method as in Claim 145 wherein the first Actor further:

13   identifies the maximum acceptable risk associated with each risky Risky Rule in a

14   first risky Risky Rule Set at the second level;

15   determines the risk associated with each risky Risky Rule; and,

16   for each risky Risky Rule in the first risky Risky Rule Set with risk that is not

17   below the maximum acceptable risk associated with said risky Risky Rule, further

18   refines Actions of each such risky Risky Rule by delegating its Actions as a Goal

19   to a third Rule Set, and the third Rule Set is at a third level.

20

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22 149. (Previously Presented) A method as in Claim 145 wherein the step of

23 communicating further comprises stating at least one Rule having at least one Condition

24 responsive to said desired Action and having an Action that performs said step of

25 communicating.

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28 150. (Previously Presented) A method as in Claim 145 wherein said first result is a

29 qualitative measure of at least one member of a set of measurable properties comprising

30 performance and Goal completion.

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2   151. (Previously Presented). A method as in Claim 145 wherein said first Actor effects
3   Delegation to at least one subordinate Actor any combination of any number of the
4   members of a Delegation set consisting of responsibility, accountability, and authority
5   that belong to the first Actor.

6

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8   152. (Previously Presented) A method as in Claim 151 wherein said first Actor further
9   effects Delegation by a Delegation Rule comprising at least one Delegation Condition
10 which tests the appropriateness of achieving said desired Action and at least one Action
11 which identifies at least one Actor as recipient of said Delegation.

12

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14 153. (Previously Presented) A method as in Claim 152 wherein the Delegation Rule
15 delegates authority by at least one member of a set comprising establishing at least one
16 Rule Set, modifying at least one Rule Set, and deleting at least one Rule Set.

17

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19 154. (Previously Presented) A method as in Claim 151 wherein the first Actor delegates
20 authority by at least one member of a set comprising establishing at least one Rule Set,
21 modifying at least one Rule Set, and deleting at least one Rule Set.

22

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24 155. (Previously Presented) A method as in Claim 151 wherein said Delegation of
25 accountability is accomplished by enabling at least one member of a set, comprising said
26 second Actor and said second Rule, to alter at least one member of a set comprising
27 measurement of predefined success and measurement process.

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30 156. (Previously Presented) A method as in Claim 145 further comprising identifying a
31 second Actor according to a Goal stated as a set of requirements Rules and a set of

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1   requirements Constraints, and according to measurements stated as a set of capabilities

2   Rules.

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5   157. (Currently Amended) A method as in Claim 156, wherein each requirement Rule in

6   said set of requirements Rules comprises both:

7   at least one requirements Condition identifying at least one member of a set

8   comprising the desired Action and at least one capability required to accomplish

9   said desired Action; and,

10   at least one requirements Action identifying at least one member of a set

11   comprising at least one capability of said second Actor and said desired Action.

12

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14 158. (Currently Amended) A method as in Claim 156, wherein each capability Rule in

15 said set of capabilities Rules consists of at least one member of a set comprising:

16   at least one capabilities Condition identifying at least one Actor and at least one

17   capabilities Action identifying at least one capability of said Actor; and,

18   at least one capabilities Condition identifying at least one capability, and at least

19   one capabilities Action identifying at least one Actor having said capability.

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22 159. (Currently Amended) A method as in Claim 156, further comprising a step of

23 matching said second Actor with said desired Goal by at least one criteria for comparing

24 at least one requirements Rule and at least one capabilities Rule.

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27 160. (Previously Presented) A method as in Claim 159 wherein said criteria is established

28 using at least one member of a match set comprising a best fit match algorithm, a fuzzy

29 match algorithm, an approximate match algorithm, and an exact match algorithm.

30

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1   161. (Currently Amended) A method as in Claim 112 wherein the step of modifying at

2   least one Element through the Action of at least a Rule whose Condition is triggered by at

3   least one input from at least one real-world event; further comprises:

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5   defining a first adaptation process comprising at least one adaptation Rule;

6

7   constructing the adaptation Rule from a third ~~Third~~ Rule and requiring in the

        adaptation Rule's Action at least one member of a set of Actions comprising

8   Element creation, self-modification, feedback, contradiction resolution, conflict

9   resolution, correction for failure, and decision making, each of which is not

10   already any previously existing Rule's Action;

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13   satisfying the Condition of the adaptation Rule through an event; and,

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15   affecting at least one Element through the Action of the adaptation Rule.

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18   162. (Previously Presented) A method as in Claim 161 wherein said first adaptation

19   process is independent of any external agent.

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22   163. (Previously Presented) A method as in Claim 161 further comprising monitoring

23   performance by and against specific metrics;

24   wherein the Condition of the adaptive Rule is satisfied by performance deviations

25   from the specific metrics; and the Action of the adaptive Rule is representative of

26   at least one member of a set comprising business events, business measures,

27   business decisions, business Rules, and business processes.

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30   164. (Currently Amended) A method as in Claim 161 further comprising:

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1   modifying, through the Action of at least one adaptation Rule, at least a first

2   changed Changed Rule instantiated at a first level;

3   effectively modifying through the first changed Changed Rule instantiated at a

4   first level at least a first Goal of the first level; and

5   permitting but not requiring intervention from a higher level.

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8   165. (Currently Amended) A method as in Claim 161 further comprising:

9   continuously monitoring for at least one occurrence of the at least one real-world

10.   event; and,

11   continuously modifying the Elements of the dynamic process, in response to the

12   occurrence of the at least one real-world event.

13

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15   166. (Currently Amended) A method as in Claim 161 further comprising:

16   incorporating at least one member of a set of dynamic processes comprising

17   creation, deletion, modification, and correction of both objectives Objectives and

18   Elements;

19   linking the adaptation process to at least one member of the set of dynamic

20   processes; and,

21   modifying the objectives Objectives and Elements by the adaptation process

22   according to at least one member of a set comprising Conditions and Constraints.

23

24

25   167. (Previously Presented) A method as in Claim 161 wherein the step of modifying at

26   least one Element comprises:

27   detecting a contradiction;

28   changing at least one Rule Set, further comprising:

29   identifying at least a first and second conflicting Rule; and,

30   resolving the contradiction by at least one member of a set comprising adding a

31   new Constraint, altering a existing Constraint, adding a new Rule, altering at least

15

1   one of the first and second conflicting Rules, and eliminating at least one of the

2   first and second conflicting Rules; and,

3   logically differentiating the Actions of the first and second conflicting Rules.

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6   168. (Previously Presented) A method as in Claim 161 further comprising reducing at

7   least one operational latency in the dynamic process through the Action of the adaptation

8   Rule.

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11   169. (Previously Presented) A method as in Claim 161 wherein the adaptation Rule's

12   Condition is satisfied when a first contradiction occurs, and the adaptation Rule's Action

13   modifies at least one Element.

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16   170. (Previously Presented) A method as in Claim 169 wherein the first contradiction

17   comprises at least first and second logically-conflicting Elements, and the adaptation

18   Rule's Action selects one of the conflicting Elements through at least one member of a

19   set of selection techniques comprising random selection, deterministic selection, and

20   arbitrary selection, and modifies the selected Element.

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23   171. (Previously Presented) A method as in Claim 170 wherein the modification of the

24   selected Element prevents simultaneous application of the first and second logically-

25   conflicting Elements.

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28   172. (Previously Presented) A method as in Claim 169 wherein the first contradiction

29   comprises at least first and second logically-conflicting Elements, and the adaptation

30   Rule's Action alters at least one of the first and second logically-conflicting Elements and

31   creates a differentiation between the first conflicting Rule's Condition and the second

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1   conflicting Rule's Condition, said differentiation preventing the first conflicting Rule's

2   Condition and the second conflicting Rule's Condition from being satisfied by the same

3   set of measurable inputs and Elements.

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6   173. (Previously Presented) A method as in Claim 172 wherein the adaptation Rule's

7   Action alters at least one of the first and second logically-conflicting Elements, modifies

8   the first logically-conflicting Element to include a Constraint not present in the second

9   logically-conflicting Element, and prevents the possibility of the first and second

10   logically-conflicting Elements from simultaneously occurring.

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13   174. (Previously Presented) A method as in Claim 161 wherein the step of constructing

14   the adaptation Rule further comprises:

15   stating the adaptation Rule's Condition to be satisfied when a first failure occurs;

16   and,

17   stating the adaptation Rule's Action to both incorporate modification of at least

18   one Element and effect a correction for the first failure.

19

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21   175. (Previously Presented) A method as in Claim 174 wherein the first failure comprises

22   not attaining a first Goal and the modification of at least one Element enables the first

23   Goal to be attained by correcting at least one member of a set comprising at least one

24   cause of the first failure and at least one effect of the first failure.

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27   176. (Previously Presented) A method as in Claim 174 wherein the modification of at

28   least one Element includes at least one member of a set of steps comprising creating,

29   modifying, and deleting a second adaptation Rule.

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1   177. (Currently Amended) A method as in Claim 174 wherein the first failure comprises

2   not detecting a Measurable value Value and the modification of at least one Element

3   comprises at least one member of a set comprising creating the Element, modifying the

4   Element, and deleting the Element.

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7   178. (Currently Amended) A method as in Claim 174, wherein a second failure

8   comprises not attaining a second Goal and the modification of at least one Element

9   includes the step of redeclaring and restating at least one Action of at least one Rule as a

10   second dynamic process.

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13   179. (Currently Amended d) A method as in Claim 174, wherein the first failure

14   comprises not attaining a first Goal and the modification of at least one Element enables

15   said first Goal to be attained by correcting at least one member of a failure set comprising

16   at least a first cause of the first failure and at least a first effect of the first failure.

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19   180. (Currently Amended) A method as in Claim 174 wherein the adaptation Rule's

20   Action modifies at least a member Rule of the objective Objective Rule Set and, when the

21   member Rule's Condition is satisfied, the member Rule's Action modifies, without

22   human intervention, at least a first member of the set of measurable Goals.

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25   181. (Currently Amended) A method as in Claim 174 wherein the adaptation Rule's

26   Action modifies at least a first Adaptable Rule of a set of Rules and, when the first

27   adaptable Adaptable Rule's Condition is satisfied, the first adaptable Adaptable Rule's

28   Action modifies, without human intervention and without modification of any Rule of the

29   objective Objective Rule Set, at least a first member of a set comprising subordinate

30   Goals and measurable Goals.

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2   182. (Currently Amended) A method as in Claim 174, wherein the step of declaring and

3   stating at least one objective Objective Rule Set further comprises:

4   stating at least a first objective Objective Rule Set and a second objective

5   Objective Rule Set, wherein the first objective Objective Rule Set operates at a

6   first level of the dynamic process and the second objective Objective Rule Set

7   operates at a second level of the dynamic process;

8   and wherein the adaptation Rule's Condition effectively defines the need for a

9   closed-loop effect in said first level and the adaptation Rule's Action changes at

10   least one Element in said second level.

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13   183. (Currently Amended) A method as in Claim 174, wherein the step of modifying at

14   least one Element comprises modifying at least one member of a set comprising Goal,

15   Rule, Rule Set, Condition, Action, Constraint, Measurable value Value, and Delegation.

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18   184. (Currently Amended) A method as in Claim 174 wherein the step of declaring and

19   stating at least one objective Objective Rule Set comprises stating at least a first objective

20   Objective Rule Set and a second objective Objective Rule Set:

21   wherein the first objective Objective Rule Set operates at a first level of the

22   dynamic process and the second objective Objective Rule Set operates at a second

23   level of the dynamic process; and,

24   wherein a first Goal is associated with the first level and a second Goal is

25   associated with the second level; and the first Goal and the second Goal overlap

26   by having a sub-goal subgoal in common.

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29   185. (Previously Presented) A method as in Claim 184 further comprising modifying the

30   overlap to avoid at least one member of a set comprising confrontation problems and

31   race-condition problems.

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3   186. (Currently Amended) A method as in Claim 112, wherein the step of declaring and

4   stating at least one objective Objective Rule Set comprises stating at least a first objective

5   Objective Rule Set and a second objective Objective Rule Set, wherein the first objective

6   Objective Rule Set operates at a first level of the dynamic process and the second

7   objective Objective Rule Set operates at a second level of the dynamic process, and

8   further comprising an organizing Rule comprising:

9   an organizing Condition; and

10   an organizing Action;

11   and the organizing Condition is satisfied by the Condition of at least one Rule in said first

12   objective Objective Rule Set and the organizing Action comprises at least the second

13   objective Objective Rule Set.

14

15

16   187. (Previously Presented) A method as in Claim 186 wherein said organizing Action

17   delegates at least one member of the set comprising a Rule Set, authority, accountability,

18   and responsibility, and said organizing Rule creates a hierarchical Delegation.

19

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21   188. (Currently Amended) A method as in Claim 112 wherein the step of declaring and

22   stating at least one objective Objective Rule Set further comprises stating at least a first

23   objective Objective Rule Set and a second objective Objective Rule Set, wherein the first

24   objective Objective Rule Set operates at a first level of the dynamic process and the

25   second objective Objective Rule Set operates at a second level of the dynamic process,

26   and wherein the response to at least one Action of at least one Rule in the first objective

27   Objective Rule Set becomes at least one Condition of at least one Rule in the second

28   objective Objective Rule Set.

29

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1   189. (Previously Presented) A method as in Claim 188 wherein the first level and the

2   second level are identical, and at least one Rule in the first Rule Set receives at least one

3   response of at least one Rule in the second Rule Set as its Condition.

4

5

6   190. (Previously Presented) A method as in Claim 141 further comprising:

7   analyzing the business operations represented in said declarative and therefore

8   non-procedural representation; and,

9   refining and tuning at least one member of a set comprising Decision, Business

10   Rule, and Business Process.

11

12   191. (Canceled)

13

14   192. (Currently Amended) An apparatus for actively and declaratively managing,

15   implementing, and executing a first dynamic process incorporating a dynamic pattern of

16   operations driven by real-world Conditions, through which at least a first behavioral

17   pattern emerges, comprising:

18

19   static memory containing:

20   a set of measurable Goals and Constraints of said first dynamic process;

21   at least one Rule Set having a plurality of Rules:

22   wherein the Rules in said Rule Set may act in any order subject to

23   the limitation that, for any specific Rule in said Rule Set, that

24   specific Rule's Condition and applicable Constraints must be

25   satisfied before that specific Rule's Action may occur;

26   a declarative and therefore non-procedural representation of each Element,

27   and any of a set of steps of declaring, stating, delegating, determining, and

28   modifying;

29

30   means for accepting at least one input from the real world, said input comprising a

31   Measurable value ~~Value~~;

21

1

2   means for comparing any input against the Condition of all Elements contained in

3   the static memory;

4

5   means for delegating to at least one specific set of Actors consisting of at least

6   one Actor:

7   at least a first subordinate objective Objective, subordinate to the objective

8   Objective, stating the first subordinate objective Objective as a subset of

9   subordinate, measurable Goals and subordinate Constraints;

10   a set of Rules for accomplishing said first subordinate objective Objective;

11   authority via at least one Rule stating authority for attaining the

12   subordinate, measurable Goals of said first subordinate objective

13   Objective;

14   accountability via at least one Rule stating accountability for attaining the

15   subordinate, measurable Goals of said first subordinate objective

16   Objective; and,

17   responsibility via at least one Rule stating responsibility for attaining the

18   subordinate, measurable Goals of said first subordinate objective

19   Objective subject to the Constraints and subordinate Constraints;

20

21   means for determining if at least one Rule's Condition is satisfied and if so

22   subsequently triggering said Rule's Action wherein said Rule's Condition

23   incorporates at least one Measurable value Value from at least one member of a

24   set of sources and said set of sources comprises comprise a source internal to said

25   first dynamic process, a source external to said first dynamic process, and a

26   source in the real world;

27

28   means for modifying at least one Element through the Action of at least a Rule

29   whose Condition is triggered by at least one input from an event in the real world;

30

22

1   means for executing automatically at least a subset of the dynamic pattern of

2   operations, defining said subset of the dynamic pattern of operations as

3   comprising a plurality of operations, each operation therein being temporally

4   contiguous to at least one other operation in said subset of the dynamic pattern of

5   operations; and,

6

7   means for specifying a plurality of Elements and implementing each of the steps

8   of declaring and stating, delegating, determining, and modifying, through a

9   declarative and therefore non-procedural representation;

10

11   means for using said set of steps of declaring, stating, delegating, determining,

12   and modifying, to further the attainment of a Goal of said first dynamic process

13   independent of human action; and,

14

15   means for iterating through the steps of declaring, stating, delegating,

16   determining, and modifying.

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